Final Technical Status Report

For

DOTC-12-01-INIT059

Armor Solutions for Energetic & Non-Energetic Novel Defeat Mechanisms

28 July 2015

Ordnance Technology Initiative Team

CLogic Defense - Lead

Metalcrafters, ES Metals

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Report Documentation Page

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Approved for public release, distribution unlimited.

13. SUPPLEMENTARY NOTES

14. ABSTRACT
Summary of flight critical engineering and prototyping effort for NAVAIR to include Naval Aircraft, Aircraft Platform Interface Missions, and Aircraft Launch and Recovery Equipment (ALRE)

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**SAR**	**6**	

1. Comments on Technical/Cost/Schedule Performance

Technical: Work is complete

Schedule: Work is complete

2. Initiative Quad Chart

Goals & Objectives	Initiative Information
Develop and fabricate next generation designs using advanced materials and processes. This will include but is not limited to, component fabrication; process integration, configuration management, materials development, coatings technology, packaging technology and overall systems engineering. Prototype and integrated system components shall be produced for developmental test units, production test units and integration units.	**Initiative Lead**: CLogic LLC **Team Members**: Metalcrafters Inc.; ES Metals **Period of Performance**: thru 7/1/2016
Milestones & Technical Achievements	**Implementation & Payoff**
All milestones were completed	**Schedule**: Sep 2015 **Status**: Complete
	Technology will provide flight critical engineering and prototyping for NAVAIR to include Naval Aircraft, Aircraft Platform Interface Missions, and Aircraft Launch and Recovery Equipment (ALRE).
Current Status: Technical = Green Schedule = Green Cost = Green	

3. Supplemental Information

In order to improve the usefulness of the quad charts and provide DOTC with sufficient initiative information, the Quarterly Report must be supplemented with data described below.

3.1 Technical Achievements

Milestone Status:

Milestone	Milestone Description	% Complete
1	CVN75 Component Design & Development Drawings	100
2	CVN78 Component Design & Development Drawings	100
3	AV8 Component Design & Development Drawings	100
4	Quarterly Business & Technical Status Report	100
5	A6E-2 Component Design & Development Drawings	100
6	A6E Component Design & Development Drawings	100
7	Legacy 1 Component Design & Development Drawings	100
8	Quarterly Business & Technical Status Report	100
9	Legacy 2 Component Design & Development Drawings	100
10	Legacy 3 Component Design & Development Drawings	100
11	Legacy 4 Component Design & Development Drawings	100
12	Quarterly Business & Technical Status Report	100
13	CVN75 Modeling and Simulation Report	100
14	CVN78 Modeling and Simulation Report	100
15	AV8 Modeling and Simulation Report	100
16	Quarterly Business & Annual Technical Status Report	100
17	A6E-2 Modeling and Simulation Report	100
18	A6E Modeling and Simulation Report	100
19	Legacy 1 Modeling and Simulation Report	100
20	Quarterly Business & Technical Status Report	100
21	Legacy 2 Modeling and Simulation Report	100
22	Legacy 3 Modeling and Simulation Report	100
23	Legacy 4 Modeling and Simulation Report	100
24	Quarterly Business & Technical Status Report	100
25	CVN75 Components Fabrication Prototypes	100
26	CVN78 Components Fabrication Prototypes	100
27	Legacy 1 Modular Mock-Ups	100
28	A6E Production Test Units	100
29	AV8 Components Fabrication Prototypes	100
30	Legacy 3 Modular Mock-Ups	100

31	Quarterly Business & Technical Status Report	100
32	A6E Components Fabrication Prototypes	100
33	A6E-2 Components Fabrication Prototypes	100
34	Legacy 2 Modular Mock-Ups	100
35	Legacy 4 Modular Mock-Ups	100
36	Quarterly Business & Annual Technical Status Report	100
37	Legacy 1 Components Fabrication Prototypes	100
38	Legacy 2 Components Fabrication Prototypes	100
39	Legacy 3 Components Fabrication Prototypes	100
40	Quarterly Business & Technical Status Report	100
41	Legacy 4 Components Fabrication Prototypes	100
42	CVN75 Modular Mock-Ups	100
43	CVN78 Modular Mock-Ups	100
44	CVN75 Prototype Production Test Units	100
45	Quarterly Business & Technical Reports	100
46	AV8 Modular Mock-Ups	100
47	CVN78 Prototype Production Test Units	100
48	A6E-2 Modular Mock-Ups	100
49	AV8 Prototype Production Test Units	100
50	Legacy 1 Prototype Production Test Units	100
51	Legacy 2 Prototype Production Test Units	100
52	Quarterly Business & Technical Reports	100
53	A6E Modular Mock-Ups	100
54	A6E-2 Prototype Production Test Units	100
55	Legacy 3 Prototype Production Test Units	100
56	Legacy 4 Prototype Production Test Units	100
57	Producibility Report	100
58	Technology Transfer Report	100
59	Legacy 5 Component Design & Development Drawings	100
60	Legacy 5 Modeling and Simulation Report	100
61	Legacy 6 Component Design & Development Drawings	100
62	Legacy 6 Modeling and Simulation Report	100
63	Legacy 7 Component Design & Development Drawings	100
64	Legacy 7 Modeling and Simulation Report	100
65	Legacy 5 Modular Mock-Ups	100
66	Legacy 6 Modular Mock-Ups	100
67	Legacy 7 Modular Mock-Ups	100
68	Quarterly Business & Technical Reports	100
69	Legacy 5 Components Fabrication Prototypes	100
70	Legacy 5 Prototype Production Test Units	100

71	Legacy 6 Components Fabrication Prototypes	100
72	Legacy 6 Prototype Production Test Units	100
73	Legacy 7 Components Fabrication Prototypes	100
74	Legacy 7 Prototype Production Test Units	100
75	Final Business & Technical Report	100

3.2 Technical Readiness Level Status: 5

3.3 Technical Readiness Level Status and Technology Transfer Information:

Please indicate the current Technology Readiness Level (TRL) and technology transfer information for the prototype development effort based on the information requested and definitions in the chart (Insert chart number) below.

Technology Transition Information:

1. Technology or technologies being worked on: flight critical engineering and prototyping for NAVAIR to include Naval Aircraft, Aircraft Platform Interface Missions, and Aircraft Launch and Recovery Equipment (ALRE)
2. Is this technology an extension of a previous DOTC agreement or contract: No
3. System to which technology can transition: Unmanned Aerial Vehicles
4. Commercial applications if applicable: N/A
5. Government organizations or DoD Armed Force Services interested in technology other than AOR's organization: US Navy
6. DoD Armed force services or organizations that could benefit from technology (not mentioned above): US Air Force
7. Initial Technology Readiness Level (TRL) of technology at the start of agreement: 5
8. Current Technology Readiness Level (TRL) of technology: 5
9. Final Technology Readiness Level (TRL) of technology expected at end of agreement: 8
10. Next step in technology transition process: Continue producing prototypes for testing by Government for downselect

3.3 Problems Encountered and Action Taken

- None

3.4 Non-Traditional Defense Contractor Participation

Name of Nontraditional*	Planned Start Date	Actual Start Date	Reason for Deviation from Plan
CLogic Defense	9/2/13	9/2/13	
Metalcrafters Inc	9/16/13	9/16/13	
ES Metals	9/24/13	9/24/13	

3.5 Plans for Next Quarter: Deliver the following to the Government:

Work is complete